Core Team—State Assessment of Forest Resources (SAFR)

Notes for January 21, 2009 meeting

Committee Member Attendees (all present):

- Steve Kimball—Idaho Department of Lands (co-lead); National Fire Plan Coordinator
- David Stephenson—Idaho Department of Lands (co-lead); Urban Interface/ Planning Prog. Mgr.
- Mike Bowman—Idaho Community Forestry Advisory Council;
- Mike DeArmond—Bureau of Land Management; Forester
- Frank Gariglio—Natural Resource Conservation Service; State Forester
- Craig Glazier—Idaho Panhandle National Forest; Deputy Forest Fire Management Officer
- Kurt Mettler—Coeur d'Alene Tribe; Forestry Program Manager
- Robyn Miller—The Nature Conservancy; North Idaho Conservation Manager
- Greg Servheen—Idaho Department of Fish and Game; Wildlife Program Coordinator
- Steve Winward—US Forest Service Region 4; GIS Specialist

Committee Staff Attendees:

- Suzie Jude—Idaho Department of Lands; Data Coordinator
- Mary Fritz—Idaho Department of Lands; Planning and Development Specialist

1) Welcome, Introduction—Steve and Dave

2) Overview of Proposed ID SAFR Methodology—Dave

D. Stephenson provided a quick synopsis of the SAFR, its purpose and intended use. Additional information is in the minutes of the November 21, 2008 SAFR Stakeholder meeting and the *Farm Bill Requirement & Redesign Components: STATE ASSESSMENTS & RESOURCE STRATEGIES Final Guidance* document, both attached to the e-mail invitation to this meeting. Dave also discussed the methodology the attendees at the Stakeholder meeting suggested we use. It classifies issues as those which either threaten Idaho's forests or for which Idaho Forests provide benefit. An attachment to these minutes provides a general explanation of this methodology. R. Miller noted that the resulting matrix which classifies areas of the state by benefits and threats (see attached document on methodology) may need to be reconsidered. That is, we may want to place more weight on areas that provide benefit over those at risk. Dave noted that the way the squares in the matrix are valued can be modified to accommodate this should the committee decide this makes most sense. The issues that will drive the assessment may affect how this is considered.

Some additional items discussed were:

1) This assessment will focus on forested areas (i.e. not rangelands). An assessment of these lands may be developed subsequent to this project, but the issues will likely be different. A question was asked as to whether pinion pine/juniper forests would be included. D. Stephenson noted that they likely can be, perhaps by using a mask on precipitation or some other indicator.
2) The committee discussed whether to split rural and urban areas as separate but equal assessments. The decision was to keep them together at this time, since the issues may have an influence on this. If possible, leaving them together may make sense since issues don't start or stop at political boundaries.

3) Issue Identification—Steve

The committee reviewed the Federal guidance and the list of issues developed in a multi-agency group (MAG) meeting last June and by the Stakeholder group in November. The MAG comprised members of the ID Stewardship Advisory Committee, the ID Community Forestry Advisory Council, ID Fire Plan Working Group, and others from various state and federal agencies, consultants, and conservation groups. The intent of the MAG was to help the IDL develop issues that most important to Idaho Forests and project ideas for how to address those issues within the guidelines of State and Private Forestry Redesign. The committee reviewed a consolidated list of these issues, provided some additional thoughts on issues and, after discussion, decided upon the list on page 3. This list will be sent to the full Stakeholder group for comments.

4) Data Needs

The committee then reviewed a list of possible datasets compiled by D. Stephenson or suggested by the SAFR National Guidance. Going through each issue, suggestions for potential datasets or sources of data were discussed and listed, and assignments made on who would follow up on these. It was noted by M. DeArmond that non-spatial data can be used to help inform the assessment, so data need not necessarily be restricted to these. The committee did feel that as much as possible, location-based data will be most relevant in determining priority areas in which to focus efforts. The potential datasets and/or sources are listed in the table beginning on page 4. Additional notes regarding each of the issues/data are in the referenced endnotes starting on page 8.

PLEASE E-MAIL DATA/ DATASETS TO DAVID STEPHENSON BY FEBURARY 20TH.

5) Next meeting date

The next meeting will be on March 5, from 0900—1400 PDT. So far, arrangements have been made for video conference meeting sites in Boise, Coeur d'Alene and Odgen the same as our last meeting. Steve Kimball is working on getting an additional site in Moscow.

State Assessment of Forest Resources – List of Issues in Idaho (location based)

Rank	Threats (that affect forests)
	Climate Change • Species conversions • Changing wildlife habitats/ (predicted) loss of habitats • Changing/ decreasing water quantity
	Lack of infrastructure/markets (wood products and ecosystem) • Decrease timber prices & markets • Decreased supply of wood fiber • Lack of management • Current economy/ rising fuel/ transportation costs • Lack of market diversity • Loss of industrial acreage • Increase cost of litigation
	Declining Forest Health • Invasive species • Insects and Diseases • Fragmentation
	Catastrophic Wildfire • Property loss • Habitat loss • Hydrologic • Soil losses • Air quality
	Development/ subdivisions/ population growth • Counties unprepared for growth/ lack of planning • Developers don't understand benefits of tree retention • Inadequate infrastructure (esp. for water) • More people means more pressures on forests
	Recreation pressure (ATV's, trespassing, etc.)

Rank	Benefits (that forests affect)
	People • Public Health • Recreation • Cultural • Ecosystem benefits • Quality of life
	Wildlife • Fish (Anadromous and bull trout) • Wildlife (game/ indicator species) • Threatened & Endangered species • biodiversity
	Water quality and quantity • Drinking water • Aquifer recharge • Education and participation in conservation • Non-point source • Stormwater management
	Air quality/ Energy conservation • Ozone/ VOC's • Particulates • CO_2 • NOX/ SOX
	Economic potential / sustainable communities • Biomass • Wood products • Ecosystem services
	Healthy Forest Ecosystems • Forest Mosaic • Open Space • Seral Species • Fire adapted ecosystems • Post-fire restoration
	Connecting with nature—Improve knowledge/ understanding • Address nature deficit syndrome • Address access to natural areas • What causes people to change behavior?

Potential Datasets to Inform Issues

Issue	Who	Data Layer	Dataset/ Source	Comments
Climate Change[i] • Species conversions	Frank	Climate change model	Rocky Mountain Research Station	
	Mike D.	Climate Change vegetation change model BC	British Columbia	
	Robyn	Composite of models	TNC	
	Kurt	Information from ITECH		
Lack of infrastructure/markets[ii] **(wood products and ecosystem)** • Decrease timber prices & markets (mills closing) • Decreased dependable supply of wood fiber • Lack of management • Current economy/ rising fuel/ transportation costs • Lack of market diversity • Loss of industrial acreage • Increased cost of litigation	Dave	Forest cover	2001 NLCD dataset/ Gap 2	
	Dave-check	Mill locations/ Distance to mills	Check with IDL	
		Coordinated Resource Offering Protocol (CROP)	In development for most of Idaho (USDA-FS)	Likely won't be ready in time
	Mary	Forest Productivity		Don't have
	IDL	Areas dependent on forest economy	Jay O'Laughlin—U of ID	
	Dave?	Habitat type (inferences)	USFS (veg map classification)	
	Suzie	Forest Productivity	Tax commission	
	Mary/ Suzie	Timber industry information	Department of Commerce Not geospatial	
	Robyn	Areas dependent on forest economy	County data report	
Declining Forest Health[iii] • Invasive species • Insects and Diseases • Fragmentation	Dave	Forest health risk (insects and diseases—potential)	National Insect & Disease Risk Map/data & Aerial detection	
	Dave	Invasive Species (% cover of forest species)	ID Dept of Agriculture	
	Dave	Roads layer	ITD/forest service/ tiger/ IDL	

Potential Datasets to Inform Issues

Issue	Who	Data Layer	Dataset/ Source	Comments
Catastrophic Wildfire[iv] • Property loss • Habitat loss • Hydrologic • Soil losses • Air quality	Steve K	Wildfire risk	Wildfire Risk	
	Steve K	Wildland-urban interface	WUI—Idaho Fire Plan	
		Existing CWPPs *(Is this included in the WUI data?)*		
	Steve K	Fire Regime condition class	Landsat	
Development/ subdivisions/ population growth[v] • Counties unprepared for growth/ lack of planning • Developers don't understand benefits of tree retention • Inadequate infrastructure (esp. for water) • More people means more pressures on forests	Dave	Development risk	Theobold	
	Dave	Forest Fragmentation	USGS	
	Dave/ Suzie	Domestic water rights/ Well locations / densities	IDWR	
	Greg	Headwaters study		
	Greg	Parcel data (may not yet exist)		
	Dave/ Suzie	Ownerships	USFS?	
Enhance connection with nature—Improve knowledge/ understanding[vi] • Address Nature deficit disorder • improve access to natural areas • What causes people to change behavior?	Suzie	Distance traveled to recreation	ID tourism	
	Suzie	Proximity to protected/ public lands		
Recreation pressure[vii] **(ATV's, trespassing, etc.)**	Dave	Distance to population centers	Pop. Density/quantity—Census	
	Steve G	USFS/ BLM Travel plan map/ visitor use		
	Suzie	ID Public recreation sites		
	Suzie	Wildlife areas		

Potential Datasets to Inform Issues

Issue	Who	Data Layer	Dataset/ Source	Comments
People[viii] • Health • Recreation • Cultural • Ecosystem	Dave	Census data (pop., density)	U.S. Census	
	Dave	CARS data	USFS	
Wildlife[ix] • Fish (Anadromous and bull trout) • Wildlife (game/ indicator species) • Threatened & Endangered species • Biodiversity	We have	Threatened and endangered species habitat	Federal T&E species (IDF&G)	
	Greg	State Wildlife Action Plan		
	We have	Anadromous fish /bull trout	IDL	
	Robyn	Priority conservation areas		
	Suzie	Forest Legacy areas		
	Greg	Big game winter ranges		
	Robyn	Rural biodiversity		
Water quality and quantity[x] • Drinking water • Aquifer recharge • Non-point source • Stormwater management • Education and participation in conservation	Have	Priority watersheds	303d Impaired lakes and rivers	
	Dave	Impervious surfaces	2001 NLCD dataset	
	Have	Municipal water supply		
Air quality/ Energy Conservation [xi] • Ozone/ VOC's • Particulates • CO_2 • NOX/ SOX	Have	Impervious surfaces	2001 NLCD	
		Heat islands	??	
	Dave	Population density	US Census	
	Dave	Non-attainment areas	IDEQ	
	Dave	Canopy cover	2001 NLCD	
	Dave	Ozone concentration	DEQ?	
	Mary	CO2 potential	Jay O'Laughlin	

Potential Datasets to Inform Issues

Issue	Who	Data Layer	Dataset/ Source	Comments
Economic potential/ Sustainable communities[xii] • Biomass • Wood products • Ecosystem services	??	Biomass potential		
	??	Site productivity		
	Dave	Existing or planned mills and other forestry infrastructure	*Does this exist?*	
	Dave	Biomass energy facilities	*Likely not to difficult to develop—would be point data*	
	Dave (when available)	Coordinated Resource Offering Protocol (CROP) areas	In development for most of Idaho	
	Dave/ Suzie	Municipal water supply intakes	*Is this the same as drinking water?*	
Healthy Forest Ecosystems[xiii] • Forest Mosaic • Open Space • Seral species • Fire adapted ecosystems • Post-fire restoration	Robyn	Legacy/ Conservation Easement Potential		
	??	Open Space areas		
	Dave	Forest Restoration Potential	USFS/ ID DEQ under develop.	
Other Datasets?				

[i] **Climate Change:** ***How will climate change impact forests—species conversion (veg. to non-veg., leading to increased forest pests and fire risk, etc.)?***

Kurt Mettler reported there'd been something presented on climate change at last year's ITECH presentation. He will investigate.

Frank Gariglio reported on information presented at the SAF Conference. Frank will also check with the Rocky Mountain Research Station.

Robyn Miller with check within TNC to locate internal documentation that is a composite of regional (Idaho) climate change information.

Mike DeArmond will check on climate change model out of British Columbia he described.

[ii] **Lack of Infrastructure/Markets:** ***In what areas does a lack of (or decline of) infrastructure or markets have the greatest impact (local economies, overall forest management, etc.)?***

There may be information available from the Department of Commerce in Boise, but it won't be geospatial. Breakdown of information is by county.

Forest productivity information is available from Rod Brevig (State Tax Commission).

Habitat type available from USFS (vegetation class) that can infer productivity

IDL will ask Jay O'Laughlin about what areas of Idaho are more linked to resource dependence. Greg Servheen will send Dave Stephenson info. Robyn will locate county data report.

Leona Svancara with the Idaho Landscape Dynamics Lap is working on GAPII. Mike DeArmond suggested that we look at the "new" LandSAT data and compare with the "old" LandSAT data to pick out the most current fire damaged areas of Idaho. Fire data is available in BLM office for post fire restoration rehabilitation. Some discussion followed about what Landfire is – Missoula fire model.

[iii] **Declining Forest Health:** ***Where are forests most threatened by insects and disease and Invasive species?***

Invasive species – extract percent cover. Available from Idaho Dept. of Agriculture. Can be overlaid onto forest cover.

Fragmentation – a road layer could be used Greg S. said there are Tiger files available. Pull in data from private landowners? There is regional data available but it may have inconsistent definitions of fragmentation depending upon the ownership (Potlatch vs. ?). Perhaps use IDWR well point location data and compare growth over time. Also, consider using Headwaters study (economic data)- Google on internet.

[iv] **Catastrophic Wildfire:** ***In what areas are the risks to catastrophic wildfire the greatest and most problematic (damage to property and habitat)?***

Steve Kimball reported data available for fire regime condition class; relative risk to communities from wildfire; hazard risk in Idaho, WUI; and synthesized hazard risk Idaho, relative wildland fire risk. This information is available on Inside Idaho and through IDL. Problem: data does not reflect fires from 2002 onward.

[v] **Development/ subdivisions/ population growth:** ***Which ex-urban forest areas in our State are most likely to develop to urban densities in the next 20 years?***

Theobald data is available that is predictive into the future (in ten year increments through 2060).

Impervious surfaces - 2001 NLCD.

Fragmentation – see forest health above.

Parcel data – Greg S. has access to this at BLM and he will check on it. Forest Stewardship SAP ownership data compiled by BLM. Problem – dated information at least 5 years old.

Domestic water rights data available from IDWR.

[vi] **Enhance connection with nature—Improve knowledge/ understanding:** ***In what areas of the state is there the greatest potential to connect people with nature? Consider distance from population centers, available protected lands, etc.***

Trend data is available from state parks and national forests on visitor use.

(D)NRI?

Rural/urban divide – how do you show geospatially? Think about the outcome we want to get to.

Benefit – buffer public lands/conservation lands. Look at travel distance to state and national parks through travel plan maps (BLM, USFS). Threat – over use, disturbance, pressure, reduce public use. Look for one data set that hits them both. Enhance connection with nature by improving knowledge and understanding (Suzie will work on this).

[vii] **Recreation pressure:** ***What areas are at greatest risk from recreation pressures?***

Suzie will look at Idaho's public recreation site.

[viii] **People:** ***Where are the people who are benefited from forests (with respect to ecosystem benefits, quality of life, health, etc.)?***

[ix] **Wildlife:** ***In what areas of the state are wildlife and fish most benefited from forests (keystone species, habitat, etc.)?***

No one layer is currently available of conservation easements; one is being created but not on our timeline.

Ecoregional assessment that looks at biodiversity statewide – Robyn will research.

Big game winter ranges – Greg S. will research.

[x] **Water quality and quantity:** ***Where can forestry techniques along waterways or within watersheds be applied to improve water quality and quantity (such as for drinking water/ municipal watersheds, stormwater/ groundwater recharge, impaired waterways) most effectively in our State?***

Use same layers as SAP? 303d impaired and public drinking water supply (IDEQ) .

[xi] **Air quality/ Energy Conservation:** ***In what areas do forests most benefit air quality and energy conservation (CO2, Ozone, non-attainment, particulates, energy reduction)?***

Contact Jay O'Lauglin at UI regarding carbon sequestration data/information.

What are heat islands? Albedo?

[xii] **Economic potential/ Sustainable communities:** ***In what areas is the economic potential from forests greatest? Consider wood products, biomass, ecosystem benefits.***

[xiii] **Healthy Forest Ecosystems:** ***What ex-urban areas of the state have the greatest potential for forest restoration work? The end goal are forests that are have a good mosaic of cover types, are fire adapted, contain appropriate seral species, etc.***